Avocent®

Emerge™ DM2000 Desktop Manager

Installer/User Guide

USA Notification

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Canadian Notification

This class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

Safety and EMC Approvals and Markings

FCC Class B, EN 55022 Class B, EN 61000-3-2/-3-3, CISPR 22 Class B, EN 55024/CISPR 24, (EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8, EN 61000-4-11), EN 60950/IEC 60950-Compliant, UL Listed (USA), CUL Listed (Canada), TUV Certified (Germany), CE Marking (Europe)

Emerge™ DM2000 Desktop Manager

Installer/User Guide

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Instructions

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the Management Appliance.

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CHAPTER 1

Product Overview

Introduction

The Emerge™ DM2000 Desktop Manager (Management Appliance) is a secure, web browser-based, centralized enterprise management solution that allows users to remotely manage and monitor multiple Emerge ECMS2000U Digital Workstation Extender systems.

The addition of this appliance allows the combination of ECMS Transmitters and ECMS Receivers to operate in Desktop Mode. This mode allows a user to log in to any ECMS Receiver and the system will connect automatically to the ECMS Transmitter that has been assigned to that user.

An Extender system comprises two units - an ECMS Receiver that is located at the user's desk, and an ECMS Transmitter that is attached to a remote computer (target device). For detailed information about the Emerge ECMS2000U Digital Workstation Extender system see the *Avocent Emerge™ ECMS2000U Digital Workstation Extender - Installer/User Guide*.

Table 1.1: List of products referred to in this manual

Name	Model
Management Appliance	Emerge™ DM2000 Desktop Manager
ECMS Transmitter	ECMS2000T
ECMS Receiver	ECMS2000R

Features and Benefits

Web-based access and control

The Management Appliance provides secure "point-and-click" web browser-based access to control virtually any data center device using managed appliances from Management Appliance software clients that may be located anywhere in the world.

Secure authentication and communication

Secure Socket Layer (SSL) encryption is used to encrypt data traveling within the Management Appliance system. Users are authenticated using the Management Appliance internal database.

Unit and user management

The Management Appliance provides centralized network access, control and security for managed units and users.

System Components

Management Appliance

The Management Appliance provides a centralized database for storing configuration, user, unit and system information. Through this the administrator can add, remove, delete and change settings for managed appliances and users. The Management Appliance also allows connection brokering to control the establishment, removal, and monitoring of associations between ECMS Receivers and ECMS Transmitters. In addition, it provides access to a range of administration options that include services for authentication, access control, logging events and monitoring

Administrators may connect to the Management Appliance via a web browser and use the Management Appliance **Explorer** window to communicate with the system.

Management Appliance Software Client

A Management Appliance Software Client is a computer with a web browser that can access the Management Appliance.

The Management Appliance supports Microsoft® Internet Explorer version 6.0 SP2.

Supported Units

For management functions, the Management Appliance uses HTTPS (Hypertext Transfer Protocol with SSL encryption) to interact with the ECMS2000U Digital Workstation Extender system.

The Management Appliance supports ECMS Transmitters and ECMS Receivers.

ECMS Transmitter

The ECMS Transmitter connects externally to the video, audio and USB ports of the target device.

The ECMS Transmitter is attached directly to the target device and draws its power from two USB ports on the remote computer. This removes the need for additional power supply connections at the rack.

The ECMS Transmitter captures, compresses, and encrypts the computer's media stream and transmits them to the ECMS Receiver over a standard TCP/IP network.

ECMS Receiver

The ECMS Receiver enables the desktop user's keyboard, video, mouse and audio devices to connect to the Emerge ECMS2000U Extender system. The ECMS Receiver is available as a desktop user station.

Target Device

A target device is the remote computer or server that a user can connect to by logging into an ECMS Receiver.

Explorer Window

When a user has been logged in and authenticated, the **Explorer** window is displayed. From the **Explorer** window, you can view, access and manage units, users and the Desktop Management System.

Figure 1.1 shows the **Explorer** window areas, which are described in Table 1.2.

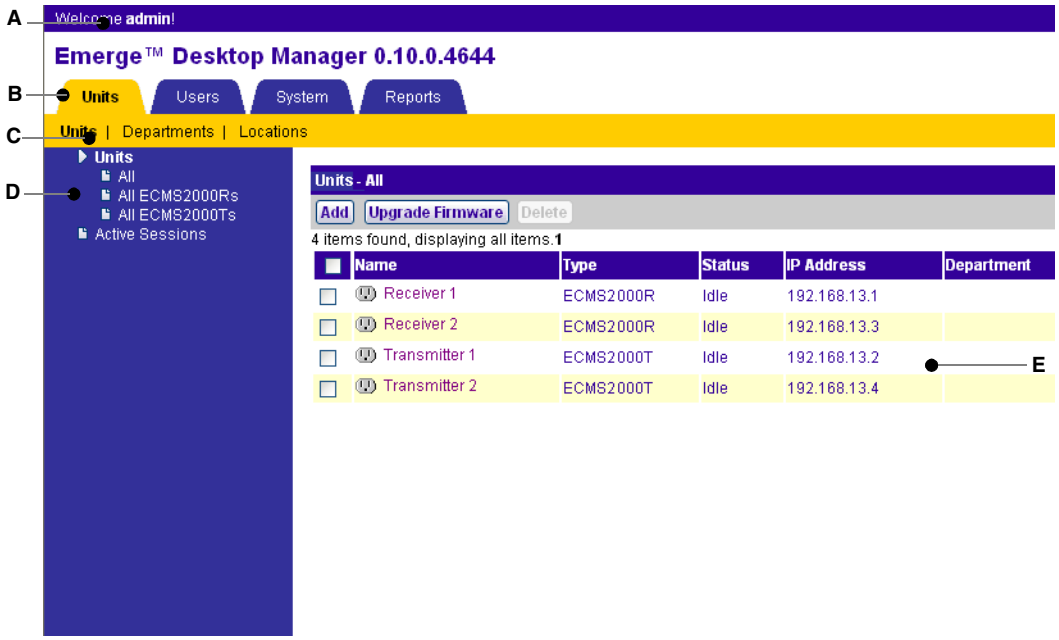


Figure 1.1: Explorer Window Areas

Table 1.2: Explorer Window Area Descriptions

Letter	Description
A	Top option bar - Use the top option bar to log out of a software session, or to access online help. The name of the logged in user is displayed on the left side of the top options bar.
B	Tab bar - Use the tab bar to display and manage units, user accounts, system settings, and reports.

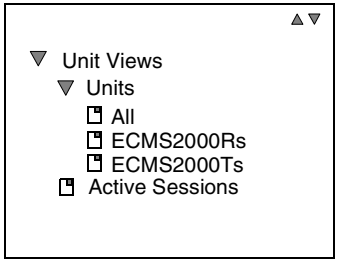
Table 1.2: Explorer Window Area Descriptions (Continued)

Letter	Description
C	Top navigation bar - The options in the top navigation bar vary depending on the active tab in the tab bar. Topics relevant to each selection display in the side navigation bar.
D	Side navigation bar - Use the side navigation bar to select system information to display or edit in the content area. The side navigation bar contains arrows that affect its display; see *Using the side navigation bar* on page 4.
E	Content area - The information specified by the tab bar, top navigation bar and side navigation bar selections is displayed and changed in the content area.

Using the side navigation bar

The side navigation bar is used to display windows that specify settings or perform operations. The contents of the side navigation bar vary, depending on the tab and top navigation bar options that are in use.

Figure 1.2 shows the location of side navigation bar arrow.



NOTE: Menus are static and cannot be expanded or collapsed

Figure 1.2: Example Side Navigation Bar

The arrows displayed indicate that a number of sub-options are available. You can display these items by clicking the main link. Where no arrow is displayed, clicking the link brings you directly to the option you have selected.

Displaying pages

Multiple page windows contain menu options that may be used to quickly navigate from one display to another.You can click to enable the **Select All** checkbox to select all items on a page. Enabling this checkbox selects all the items listed on a page regardless of whether the entire page is visible. However, for multi-page displays, items listed on other pages will not be included in the selection.

Refreshing a window

The **Units** - **All** screen automatically refreshes every 10 seconds.

Using keyboard commands

In addition to using a mouse, you can use certain keyboard commands to select and change items in windows.

Table 1.3 lists general keyboard commands that can be used.

Table 1.3: General Keyboard Commands

Key	Description
Tab	Transfers focus to the next control in the window, including the calendar
Shift-Tab	Transfers focus to the previous HTML control

Internet Explorer Considerations

The Management Appliance operates using the default Internet Explorer settings. In the event that the default Internet Explorer settings have been altered, SSL and Javascript must be enabled to successfully access the Management Appliance.

Firewalls

To access the Management Appliance through a firewall, you must ensure that the firewall uses the default HTTPS port 443.

CHAPTER 2

Hardware Installation and Setup

Introduction

This chapter describes how to install and set up the Emerge™ DM2000 Desktop Manager (Management Appliance).

NOTE: The first time you access the Management Appliance, enter **admin** as the user name and **password** as the password. The admin account is authorized to perform all configuration and access all managed devices and cannot be removed or renamed.

Safety Precautions

To avoid potentially fatal shock hazard and possible damage to equipment, please observe the following precautions:

- Do not use a 2-wire power cord in any product configuration.
- Test AC outlets at the target device and monitor for proper polarity and grounding.
- Use only with grounded outlets.

NOTE: The AC inlet is the main power disconnect.

Rack Mount Safety Considerations

- Elevated Ambient Temperature: If installed in a closed rack assembly, the operating temperature of the rack environment may be greater than room ambient. Use care not to exceed the rated maximum ambient temperature of the switch.
- Reduced Air Flow: Installation of the equipment in a rack should be such that the amount of airflow required for safe operation of the equipment is not compromised.
- Mechanical Loading: Mounting of the equipment in the rack should be such that a hazardous condition does not exist due to uneven mechanical loading.
- Circuit Overloading: Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of circuits might have on overcurrent protection and supply wiring. Consider equipment nameplate ratings for maximum current.

- Reliable Earthing: Reliable earthing of rack mounted equipment should be maintained. Pay particular attention to supply connections other than direct connections to the branch circuit (for example, use of power strips).

Cabling Installation, Maintenance and Safety Tips

The following is a list of important safety considerations that should be reviewed prior to installing or maintaining your cables:

- Maintain the twists of the pairs all the way to the point of termination, or no more that one-half inch untwisted. Do not skin off more than one inch of jacket while terminating.
- If bending the cable is necessary, make it gradual with no bend sharper than a one inch radius. Allowing the cable to be sharply bent or kinked can permanently damage the cable's interior.
- Dress the cables neatly with cable ties, using low to moderate pressure. Do not over tighten ties.
- Cross-connect cables where necessary, using rated punch blocks, patch panels and components. Do not splice or bridge cable at any point.
- Keep CAT 5 cable as far away as possible from potential sources of EMI, such as electrical cables, transformers and light fixtures. Do not tie cables to electrical conduits or lay cables on electrical fixtures.
- Always test every installed segment with a cable tester. "Toning" alone is not an acceptable test.
- Always install jacks so as to prevent dust and other contaminants from settling on the contacts. The contacts of the jack should face up on the flush mounted plates, or left/right/down on surface mount boxes.
- Always leave extra slack on the cables, neatly coiled in the ceiling or nearest concealed location. Leave at least five feet at the work outlet side and 10 feet at the patch panel side.
- Choose either 568A or 568B wiring standard before beginning. Wire all jacks and patch panels for the same wiring scheme. Do not mix 568A and 568B wiring in the same installation.
- Always obey all local and national fire and building codes. Be sure to firestop all cables that penetrate a firewall. Use plenum rated cable where it is required.

Management Appliance Configuration

A typical Management Appliance configuration, as illustrated in Figure 2.1, includes the appliance and the transmitters and receivers connected to the local area network (LAN). A terminal, or a workstation running a terminal emulation program, is connected to the serial port for configuring basic network settings. The Management Appliance, transmitters and receivers, and user accounts are then configured from the browser interface to the Management Appliance.

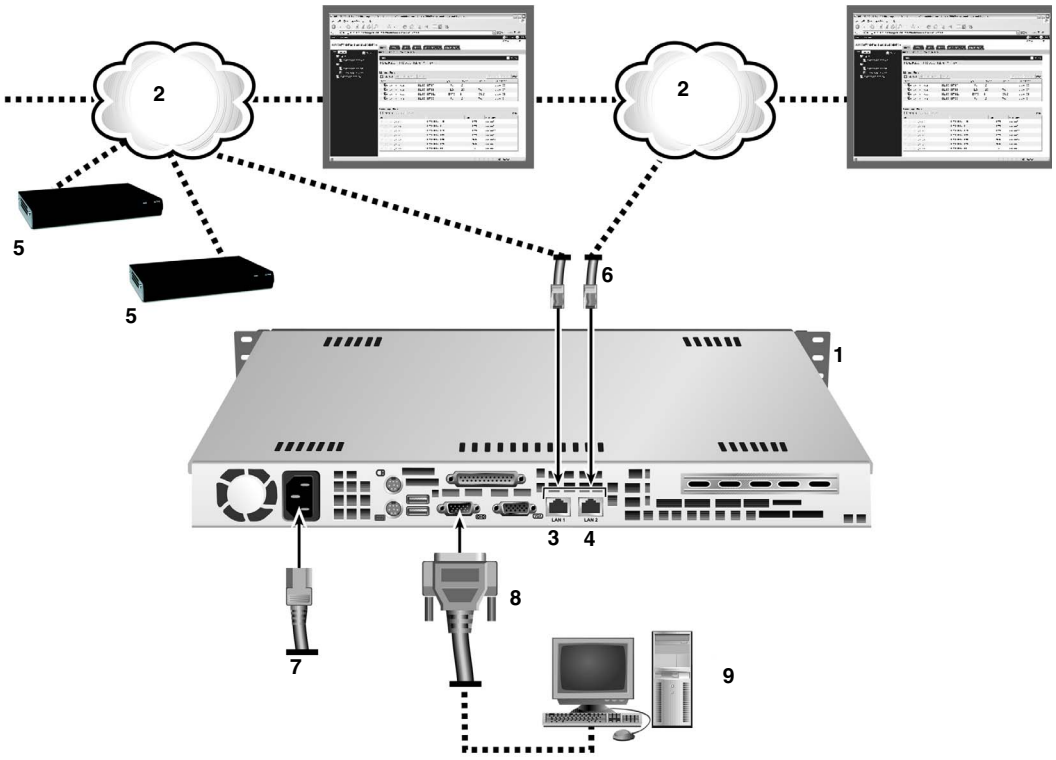


Figure 2.1: Management Appliance Configuration

Table 2.1: Descriptions for Figure 2.1

Number	Description
1	Management Appliance
2	LAN
3	LAN Port 1
4	LAN Port 2
5	Transmitters and receivers
6	CAT 5 Cables
7	Power
8	Connection to the Serial Port
9	Terminal or Workstation (for Configuration)

Installing the Management Appliance

NOTE: The Management Appliance may be rack mounted in a 1U configuration.

To connect and power up the Management Appliance:

1. Install the Management Appliance on the top of the server rack or at the location from which it will be used.
2. The LAN Port 1 Ethernet port on the back panel of the Management Appliance should be connected to the LAN to which the transmitters and receivers are connected.

NOTE: All ECMS Transmitters and ECMS Receivers must be connected to the same LAN.

3. Attach one end of the supplied power cord into the back panel of the Management Appliance and attach the other end to an appropriate AC power source.
4. Power up the Management Appliance.

NOTE: The ECMS Transmitters and ECMS Receivers must be connected to LAN port 1. However, you can access the Management Appliance using the browser on a computer connected to either LAN port 1 or LAN port 2.

WARNING: To reduce the risk of electric shock or damage to your equipment:
- Do not disable the power cord grounding plug. The grounding plug is an important safety feature.
- Plug the power cord into a grounded (earthed) outlet that is easily accessible at all times.
- Disconnect the power from the target device by unplugging the power cord from either the electrical outlet or the target device.

Using the serial port to configure the IP addresses of the Management Appliance

To assign an IP address to the Management Appliance, you must first establish a connection to the serial menu. You can then use the options on the serial console menu to configure the network settings for each of the LAN Ports on the Management Appliance.

NOTE: If you are connecting to only one LAN, only LAN port 1 needs to be configured

Perform the following procedure to configure the IP address of the Management Appliance.

To configure the IP address of the Management Appliance:

1. Connect a terminal or a workstation that is running a terminal emulation program to the serial port on the back panel of the Management Appliance.
2. Start a session with the following port settings:
   - Serial speed: *9600* bps
   - Data length: *8* data bits

- Parity: *None*
- Stop Bits: *1*
- Flow Control: *None*

3. Once a connection is established, a serial console menu appears.
4. You then type `2` to configure any of the following network settings:
   - Set eth speed
   - Choose using DHCP or defining an IP address
   - Type subnet mask
   - Type gateway IP address
   - Select default gateway
   - Define primary DNS and secondary DNS

NOTE: The IP address on LAN Port 1 must not change during operation of the appliance. Therefore always configure LAN port 1 with a static IP address or, if using DHCP, ensure that the IP addresses are assigned with unlimited lease times. There is no restriction on how LAN port 2 can be configured. It is also possible to configure DNS on the Management Appliance, if it is required for administrator access through a web browser.

NOTE: If DHCP is selected, the Management Appliance must be re-booted for the change to take effect.

5. Set time and date on the serial menu
6. Type **0** to exit.

CHAPTER 3

Managing Units

Introduction

The Emerge™ DM2000 Desktop Manager (Management Appliance) is used to manage networks of ECMS Receivers and ECMS Transmitters (units). Using the Management Appliance, an administrator can add units, view and edit unit properties and initiate a variety of other operations.

Accessing the Management Appliance Web Interface

To access the Management Appliance web interface:

1. Open Microsoft® Internet Explorer.
2. In the **Address** bar, type the url for the Management Appliance. The address will be in the format http://<addr>> where << addr>> is the IP address assigned to the Management Appliance LAN port 1.

NOTE: If DNS is enabled the address is the fully qualified host name assigned to the Management Appliance.

3. Press **Return.** The Management Appliance login screen appears.
4. Enter login user name and password. Default username is ‘admin’. Default password is ‘password’.

NOTE: If you have forgotten your password, contact Avocent Technical Support.

Units View Windows

The **Units View** windows display the list of units that have been added to the Management Appliance database.

Units are displayed in a table format with column headings. You can use the checkbox to the left of each unit name to select/deselect the unit for an operation. To select all the units on a page, click the checkbox at the left of all the column headings at the top of the list - this is usually to the left of the **Name** column. Clicking the *Select All* checkbox will automatically enable the checkboxes for all units on that page. To deselect items that were previously selected, click to select the checkbox.

If the list of units spans more than one page, units on subsequent pages will not be selected.

Types of Units View windows

There are several types of **Units View** windows, which are accessed by clicking tabs and side navigation bar links.

- **All Units**: The **Units - All** window lists all managed units.
- **Unit Type**: **Unit Type** windows list all managed units of a particular type (for example, All ECMS Receivers or All ECMS Transmitters).

  The following unit types will always be visible on the side navigation bar:
  - Units
    - All
    - All ECMS Receivers
    - All ECMS Transmitters
- **Departments and Locations**: The Management Appliance provides a means to attach logical location identifiers to units. This makes it easier for administrators to track and locate units within their organization. There are two types of logical location identifiers:
  - **Departments** - Units that have been assigned to a department.
  - **Locations** - Units that have been assigned to a location.

Accessing Units View windows

To access Units View windows:

- Click the *Units* tab.
  - To display managed units:
    - Click *Units* in the side navigation bar. The **Units - All** window will open.
  - To display a **Unit Type** window, click one of the **Unit type** links in the side navigation bar. You can view a summary of all units - all ECMS Receivers or all ECMS Transmitters - by clicking the links in the side navigation bar.
- To display active media sessions:
  - Click *Active Sessions* in the side navigation bar. The **Active Media Sessions** window will open. This window lists all the users that are currently accessing ECMS transmitters, and shows which ECMS Transmitter is being accessed by which user. It also displays start times and session duration.

Units View windows fields

The following fields will appear in **Units View** window.

- **Name** - Name of the unit as defined in the Management Appliance database. Click the name to display or change unit information.
- **Type** - Type of managed unit. Managed unit types cannot be changed.

- **Status** - Current operating status of a unit. Table 3.1 lists and describes the possible values.

Table 3.1: Unit Status Values

Unit type	Status and Icon	Description
Managed units	Idle	Unit is powered up, can be communicated with, and is not associated with an active media session.
Managed units	In Use	Unit is associated with a session
Managed units	Upgrading	Unit firmware is being upgraded
Managed units	Not Responding	The Management Appliance cannot contact the unit

- **IP Address** - The IP address of a managed unit.
- **Department** - The name of the department to which a managed unit has been assigned.
- **Location** - The name of the location to which a managed unit has been assigned.
- **Revision** - The current firmware version that is installed on a managed unit.
- **ECMS Transmitter name** - The name of the ECMS Transmitter. Click the name of the ECMS Transmitter to display or change ECMS Transmitter information.
- **ECMS Transmitter address** - The IP address of the ECMS Transmitter. Click the name of the ECMS Transmitter to display or change information.

Unit Overview windows

The **Unit Overview** window contains the following information about an individual unit:

- **Managed Units** - Name, Type, IP address, MAC address, and Status of the managed units and the tools that can be used to:
  - Reboot
  - Upgrade firmware

The available tasks depend on the type of managed unit.

To view overview information for a unit:

In a **Units View** window containing units, click the name of a unit. The **Units Overview** window will open.

Adding Units

Before you can manage units in the Management Appliance, you must first add them to the Management Appliance database. You can add units to the Management Appliance database using the **Add Unit Wizard**.

The Add Unit Wizard

- You can use the **Add Unit Wizard** to:

- Add a single unit
- Discover units within an IP address range
- Discover units on an IP subnet address

The **Add Unit Wizard** can be launched from the following **Units View** windows:

- Units - All
- Units - All ECMS Receivers
- Units - All ECMS Transmitters

Adding a single appliance

This procedure is valid for ECMS Transmitters and ECMS Receivers.

NOTE: A unit can only be added to the Management Appliance database if it is powered up and attached to the network.

To add a single unit that already has an IP address:

1. In a **Units View** window containing managed units, click *Add*. The **Add Unit Wizard Welcome Window** will open. Click *Next*.
2. The **Select Add Unit Procedure** window will open. Click *Add a single unit*, then click *Next*.
3. The **Select Unit Type** window will open. Select a unit from the product list, then click *Next*.
4. The **Select Address Configuration of Unit** window will open. Click *Yes*, *the* <Managed Unit Type> *does have an address* and type the address of the unit. Click *Next*.
5. The **Search Results** window will open. The name and MAC address of the discovered unit will be displayed. Click *Next*.
6. The **Completed Successfully** window will open. To exit the **Add Unit Wizard**, click *Finish*.

Adding units from a range of IP addresses

This procedure is valid for ECMS Transmitters and ECMS Receivers.

To add a unit from a range of IP addresses:

1. In a **Units View** window containing managed units, click *Add*. The **Add Unit Wizard Welcome Window** will open. Click *Next*.
2. The **Select Add Unit Procedure** window will open. Click *Discover units within an IP address range*, then click *Next*.
3. The Enter IP Address Range window will open.
   a. Type the IP address in standard dot notation (xxx.xxx.xxx.xxx), from which to begin the search.
   b. Type the IP address in standard dot notation (xxx.xxx.xxx.xxx), at which to end the search.
   c. Click *Next*.

4. The Management Appliance will search for managed units within the IP address range. When the search is completed, the **Select Units to Add** window will open, listing the results.
5. Add units
   - To add one or more managed units, select the managed units in the U**nits Found** list, then click *Add*. The managed units will be moved to the **Units to Add** list.
   - To remove one or more managed units, select the managed units in the **Units to Add** list, then click *Remove*. The managed units will be moved to the **Units Found** list.
6. Click *Next*.
7. The **Completed Successfully** window will open. To exit the **Add Unit Wizard**, click *Finish*.

Adding Units on an IP Subnet

This procedure is valid for ECMS Transmitters and ECMS Receivers.

To add a unit from a Subnet:

1. In a **Units View** window containing managed unit, click *Add*. The **Add Unit Wizard Welcome Window** will open. Click *Next*.
2. The **Select Add Unit Procedure** window will open. Click *Discover units on an IP subnet addres*s, then click **Next**.
3. The **Enter Subnet Address Window** will open.
4. Type the IP address in standard dot notation (xxx.xxx.xxx.xxx) and click **Next**.
5. The Management Appliance searches for managed units within the IP subnet address range. When the search is completed, the **Select Units to Add** window will open, listing the results.
6. Add or remove units
   - To add one or more managed units, select the managed units in the **Units Found** list, then click *Add*. The managed units will be moved to the **Units to Add** list.
   - To remove one or more managed units, select the managed units in the **Units to Add** list, then click *Remove*. The managed units will be moved to the **Units Found** list.
7. Click *Next*.
8. The **Completed Successfully** window will open. To exit the **Add Unit Wizard**, click *Finish*.

To add a single unit that does not yet have an IP address (for example, if the IP address is lost):

1. In a **Units View** window containing managed units, click *Add***.** The **Add Unit Wizard Welcome Window** will open. Click *Next*.
2. The **Select Add Unit Procedure** window will open. Click *Add* a single unit, then click *Next*.
3. The **Select Unit Type** window will open. Select a unit from the product list, then click *Next*.
4. The **Select Address Configuration of Unit** window will open. Click *No*, *the* (Managed Unit Type) *does not have an address*. Click *Next*.

5. The **Configure Unit Network Settings** window will open.
   a. Type the IP address and subnet mask, in standard dot notation (xxx.xxx.xxx.xxx), for the managed unit.
   b. Optionally, type a gateway in standard dot notation (xxx.xxx.xxx.xxx).
   c. Click *Next*.
6. The **Add Discovered Unit** window will open. Select the discovered unit from the list, then click *Next*.
7. The **Completed Successfully** window will open. To exit the **Add Unit Wizard**, click *Finish*.

Deleting Units

When you delete a unit, it is removed from the Management Appliance database, and all associated connections will also be deleted.

To delete a unit:

1. In a **Units View** window, click to select the checkbox next to the unit name. To delete all units on the page, click to select the checkbox to the left of name at the top of the list.
2. Click *Delete*. The unit is immediately removed from the Management Appliance database and disappears from the list.

Managing units

All configuration options under the **Unit Settings** menu in the side navigation window involve live communication with an ECMS Transmitter or ECMS Receiver. The transmitter or receiver must be powered up, discovered and added for the Management Appliance to display its properties.

If the Management Appliance cannot communicate with an ECMS Transmitter or ECMS Receiver, it will display the following communication error: "An error was encountered communicating with the Unit. Please check the unit's network settings and connectivity."

Viewing Unit Overview Information

To view a summary of all units managed by the Management Appliance:

1. Click the *Units* tab. The **Units All** window will open.
2. A list is displayed of all the units (i.e., ECMS Transmitters and ECMS Receivers) that are managed by the Management Appliance.
3. To view a list that contains only ECMS Transmitters select the All ECMS Transmitters navigation option.
4. To view a list that contains only ECMS Receivers select the All ECMS Receivers navigation option.

The Unit Overview window

The **Unit Overview** window contains the following information about an individual unit:

- Name
- Type (ECMS Transmitter, ECMS2000T, or ECMS Receiver, ECMS2000R)
- IP address
- MAC address
- Unit Session Status

The **Unit Overview** window enables you to:

- Change the name of a unit
- Reboot a unit
- Upgrade the firmware of a unit

To access the Unit Overview window:

1. Click the *Units* tab.
2. A list is displayed of all the units that are managed by the Management Appliance.
3. Click the unit name about which you require information.
4. The **Unit Overview** window will open.

To change the name of a unit:

1. Click the *Units* tab.
2. A list is displayed of all the units that are managed by the Management Appliance.
3. Click the unit name about which you require information.
4. The **Unit Overview** window will open.
5. Type a name for the managed unit. (You cannot change the type.)
6. Click *Save* and then click *Close*. The **Unit All** window will open.

Changing Unit Properties

The Management Appliance enables you to manage the following properties for each unit:

- Department
- Location
- Primary contact details (name, telephone number)

To change the properties of a unit:

1. Click the *Units* tab.
2. A list is displayed of all the units that are managed by the Management Appliance.
3. Click the unit name about which you require information.
4. The **Unit Overview** window will open.
5. Select **Properties** from the side navigation bar.

6. The **Unit Properties** window will open. This window displays all the general properties of the unit. Edit the properties you wish to change.

NOTE: Part Number (MPN), Serial Number (EID) and Model are read-only values. These values are read from a unit during discovery and cannot be changed.

7. Click *Save* and then click *Close*.
8. The updated properties are displayed.

Configuring Network Settings for an ECMS Transmitter or Receiver

The administrator can use the Management Appliance to change a unit's IP address, Subnet Mask, Default Gateway and DHCP status. Once you have implemented the changes the unit will reboot.

To change the network settings of a managed unit:

1. Click the *Units* tab.
2. A list is displayed of all the units that are managed by the Management Appliance.
3. Click the unit name whose network settings you wish to change.
4. The **Unit Overview** window will open.
5. Click *Network*. The **Unit Network Settings** window will open. To change information:
   - Type an address, in standard dot notation (xxx.xxx.xxx.xxx).
   - Type a subnet, in standard dot notation (xxx.xxx.xxx.xxx).
   - Type a gateway, in standard dot notation (xxx.xxx.xxx.xxx).
   - Enable or disable DHCP.
6. Click *Save* and then click *Close*.

Authentication Server Settings

Authentication server settings are applied only to ECMS Receivers. The **Authentication Servers'** menu item in the side navigation bar will only be displayed if the unit type is an ECMS Receiver.

To view Unit Authentication Server settings:

1. Click the *Units* tab.
2. A list is displayed of all the units that are managed by the Management Appliance.
3. Click the ECMS Receiver name about which you require information.
4. The **Unit Overview** window will open.
5. Click *Authentication Servers* under **Unit Settings** in the side navigation bar.
6. The **Unit Authentication Server Settings** window will open. This window displays the address of the authentication server used by the unit.

To change Unit Authentication Server settings:

1. Click the *Units* tab.
2. A list is displayed of all the units that are managed by the Management Appliance.
3. Click the unit name about which you require information.
4. The **Unit Overview** window will open.
5. Click *Authentication Servers* under **Unit Settings** in the side navigation bar.
6. The **Unit Authentication Server Settings** window will open. This window displays the address of the authentication server used by the unit. To change information:
   - Type an address, in standard dot notation (xxx.xxx.xxx.xxx).
7. Click *Save*.

Viewing Version Information

To view version information for a unit:

1. Click the *Units* tab.
2. A list is displayed of all the units that are managed by the Management Appliance.
3. Click the unit name about which you require information.
4. The **Unit Overview** window will open. In the **Unit Settings** in the side navigation bar click *Versions*. The **Unit Version Information** window will open, containing the following information:
   - **Release** - The overall unit build release number.
   - **Application** - The version of the application software deployed on the unit.
   - **Boot** - The version of the boot software deployed on the unit.
   - **FPGA** - The version of the FPGA deployed on the unit.

Rebooting a unit

To reboot a unit:

1. Click the *Units* tab.
2. A list is displayed of all the units that are managed by the Management Appliance.
3. Click the unit name about which you require information.
4. The **Unit Overview** window will open.
5. In the **Tools** section, click *Reboot*.

Enabling Auto-Login Mode for an ECMS Receiver

You can configure an ECMS Receiver to allow any user to access the target device paired with that ECMS Receiver, without the need to enter a user name or a password; this is called Auto-Login Mode.

To enable or disable Auto-Login Mode for an ECMS Receiver:

1. Click the *Units* tab.
2. A list is displayed of all the units that are managed by the Management Appliance.
3. Click the ECMS Receiver name about which you require information.
4. The **Unit Overview** window will open
5. Under **Unit Settings** in the side navigation bar, click *Modes*.
6. In the **Unit Auto-Login Mode** section, choose **Disable** or **Enable**.
7. If **Auto-Login** mode is enabled, select a target device from the **Auto-Login Mode Target Device** list-box. This is the target device that will be connected during the auto-login process.
8. Click *Save* and then click *Close*.
9. The unit reboots to apply the changes.

Setting the Operating Mode for an ECMS Receiver

The ECMS2000U Digital Workstation Extender system can operate in two modes - Desktop Mode and Extender Mode. The operating mode of an Extender system can be set through the ECMS Receiver.

Extender Mode is the default factory setting for an ECMS2000U Digital Workstation Extender system. In Extender Mode the platform enables an ECMS Receiver to automatically discover and connect to its corresponding ECMS Transmitter on the network. The Management Appliance is not required as part of the system.

When in Desktop Mode, an Extender system can be managed and administered through the Management Appliance. It is appropriate to use Desktop Mode if you are deploying several Extender systems.

To change the Operating Mode for an ECMS Receiver:

1. Click the *Units* tab.
2. A list is displayed of all the units that are managed by the Management Appliance.
3. Click the appropriate ECMS Receiver name.
4. The **Unit Overview** window will open.
5. Click *Modes.* The user goes to **Unit Auto-Login Operating Mode Settings**.
6. In the Unit **Operating Mode** section, choose **Extender** or **Desktop**.
7. Click *Save* and then click *Close*.
8. The unit reboots to apply the changes.

Managing Firmware Upgrades

To upgrade the firmware on a single unit:

NOTE: You cannot perform a firmware upgrade unless a firmware upgrade file has been added to the Management Appliance software repository. See *Firmware Management* on page 37.

NOTE: Upgrading the unit Firmware requires the unit to reboot; this causes a currently active session to be disconnected.

1. Click the *Units* tab.
2. A list is displayed of all the units that are managed by the Management Appliance.
3. Click the appropriate unit name.
4. The **Unit Overview** window will open.
5. In the **Tools** section, click the *Upgrade Firmware* icon. The **Upgrade Unit Firmware** wizard will launch. Click *Next*.
6. The **Select Firmware Files** window will open.
   - To add a firmware file to the update list, select the file in the **Available Firmware Files** list, then click *Add*. The properties will be moved to the **Firmware Files to Update** list.
   - Select the firmware file you wish to use.
7. Click *Next*.
8. The unit reboots to apply the new settings.
9. The **Completed Successfully** window will open.
10. Click *Finish*. The **Unit Overview** window will open.

During a firmware upgrade, the unit status in the units window will be set to 'Upgrading'. The event log can also be used to monitor the status of a unit firmware update - see Chapter 6 beginning on page 39.

When the firmware update is complete, the unit firmware revision field is updated and the unit reverts to the status 'Idle'.

Active Media Sessions

An active media session is created when a user connects to a target device by logging in through an ECMS Receiver. The Management Appliance enables you to monitor the following properties of an active media session:

- Start time of the session
- Duration of the session
- Logged in user name
- ECMS Receiver
- ECMS Transmitter

- Target PC

NOTE: It is not possible to restrict the types of media that the user can use during an active media session. A connection will enable all media sessions, Video, Audio, Keyboard/Mouse and vMedia.

All active media sessions

To view a summary of all active sessions:

1. Click the *Units* tab.
2. Click *Active Sessions* in the side navigation bar. The **Active Media Sessions** window will open. A list is displayed of all the current active media sessions.

To view detailed information about an active session:

1. Click the *Units* tab.
2. Click *Active Sessions* in the side navigation bar. The **Active Media Sessions** window will open. A list is displayed of all the current active media sessions.

Performing a Forced Log-Out

To disconnect an active media session:

1. Click the *Units* tab
2. Click *Active Sessions* in the side navigation bar. The **Active Media Sessions** window will open. A list is displayed of all the current active media sessions.
3. Click to select the checkbox to the left of the sessions. To disconnect all sessions, click the checkbox to the left of **Start Time** at the top of the list.

NOTE: If you do not have permission to disconnect an active session, you will not be able to select its checkbox or the checkbox at the top of the list.

4. Click *Disconnect*.

Department and Location Groups

You may create one or more department and location names and then associate units with them. For example, you could create department names such as Software Development and Human Resources or location names such as Lab Room 101 and System Administrator's Office.

To group units by department or location, you first create a department or location, then associate units with it. Departments or locations that contain units to which a user does not have access rights will not appear in the side navigation bar. The department or location must also have at least one unit associated with it to be displayed in the side navigation bar.

To add a department or location:

1. Click the *Units* tab.

2. To add a department, click *Departments* in the top navigation bar. The **Departments** window will open.

   To add a location, click *Locations* in the top navigation bar. The **Locations** window will open.
3. Click *Add*. The **Add Department** or **Add Location** window will open.
4. Type a name, then click *Add*. The **Departments** or **Locations** window will open.

To delete a department or location:

1. Click the *Units* tab.
2. To delete a department, click *Departments* in the top navigation bar. The **Departments** window will open.

   To delete a location, click *Locations* in the top navigation bar. The **Locations** window will open.
3. Click to select the checkbox to the left of one or more departments/locations. To delete all departments/locations in the page, click to select the checkbox to the left of **Name** at the top of the list.
4. Click *Delete*. A confirmation dialog box will appear.
5. Confirm or cancel the deletion.

To change the name of a department or location:

1. Click the *Units* tab.
2. To change the name of a department, click *Departments* in the top navigation bar. The **Departments** window will open.

   To change the name of a location, click *Locations* in the top navigation bar. The **Locations** window will open.
3. Click the name of a department/location. The **Department/Location Name** window will open.
4. Type a new 1-64 character name.
5. Click *Save* and then click **Close**. The **Departments or Locations** window will open.

To associate or change the association of an existing unit to a department or location:

1. Click the *Units* tab.
2. Click the name of a unit. The **Unit Overview** window will open.
3. Click *Properties* in the side navigation bar, then click *Location*.
4. From the drop-down lists, select the department and/or location to associate with the unit. If you do not wish to associate the unit with any site, department or location choose the top (empty) item from the menu.
5. Click *Save* and then click *Close*.

CHAPTER 4

Managing Users

Introduction

With the Emerge™ DM2000 Desktop Manager (Management Appliance) you can carry out the following operations:

- Add, change and delete user accounts
- Enable/disable user accounts
- Specify user password policy restrictions
- Change user group membership
- Display user access rights to target transmitters and managed units

User Accounts Windows

User accounts are displayed and managed through User Accounts windows.

To display the User Accounts window:

1. Click the *Users* tab. The **User Accounts - All** window is displayed.
2. To display the names of users in a user group, click the group name link under **User Accounts** in the side navigation bar. The **User Accounts** window for that group will open, listing all the users in the group.
3. To select a user, click a username in a **User Accounts** window.

Table 4.1: User Status Icons

Icon	Authentication Method	Status
Face	All	Enabled - The user can log in and use the Management Appliance.
Face with a red X	Internal	Disabled - The user cannot log in to the Management Appliance or receiver.

Adding User Accounts

Users

A user cannot log on to a receiver and access an ECMS Transmitter unless a Receiver User Account has been created for them in the Management Appliance. Only a Management Appliance administrator can create a Receiver User Account. Receiver users cannot access the Management Appliance.

Receiver User Accounts are authenticated by a Management Appliance internal authentication service.

A Management Appliance administrator specifies which target computer a receiver user is allowed to access.

To add a new user:

1. Click the *Users* tab.
2. Click *Add*. The **Add User Account Wizard Welcome Window** will appear. Click *Next*.
3. The **Type in User Credentials** window will open.
   a. Type a user name, password and confirm the password of the user you are adding.
      - A user name must be unique, and must contain between 1 and 64 alphanumeric characters. User names are case-sensitive.
      - A password must contain between 6 and 64 alphanumeric characters. With the exception of '+' and '-' all ASCII characters may be used.

   b. Click *Next*.
4. The **Assign User to User Groups** window will open. Select **Users** as the user group and click *Add*.
5. The **Completed Successful** window will open. Click *Finish*. The new user account has been added to the system.

Management Appliance Administrators

Only administrators can log in to the Management Appliance. Administrators manage the Management Appliance and control access for users. They can also set up associations between users and the ECMS Transmitter. Users and administrators can log in to a receiver to access their PC.

Administrator and user accounts are authenticated by a Management Appliance internal authentication service.

To add a new Management Appliance administrator:

1. Click the *Users* tab.
2. Click *Add*. The **Add User Account Wizard Welcome Window** will appear. Click *Next*.
3. The **Type in User Credentials** window will open.

a. Type a user name, password and confirm the password of the user you are adding.
   - A user name must be unique, and must contain between 1 and 64 alphanumeric characters. User names are case-sensitive.
   - A password must contain between 6 and 64 alphanumeric characters. With the exception of '+' and '-' all ASCII characters may be used.

b. Click *Next*.

4. The **Assign User to User Groups** window will open. Select **Administrators** as the user group and click *Next*.
5. The **Completed Successful** window will open. Click *Finish*. The new user account has been added to the system.

Deleting User Accounts

To delete one or more user accounts:

1. Click the *Users* tab.
2. Click to select the checkbox to the left of the username(s). To delete all users on the page, click the checkbox to the left of **User Name** at the top of the list.
3. Click *Delete*. A confirmation dialog box will appear.
4. Confirm or cancel the deletion.

Enabling and Disabling User Accounts

To restrict the access of a particular user to the system, you can disable that user's account within the Emerge Desktop Manager. At any point in the future, you can choose to re-enable the user's account.

To disable a user account:

1. Click the *Users* tab.
2. Select a user.
3. Click *Restrictions* in the side navigation bar.
4. Click to disable the **Disable user account** checkbox.
5. Click *Save* and then click *Close*.

To enable a user account:

1. Click the *Users* tab.
2. Select the disabled user.
3. Click *Restrictions* in the side navigation bar.
4. Click to enable the **Disable user account** checkbox.
5. Click *Save* and then click *Close*.

Managing User Accounts

Viewing User Account Overview Information

To view a summary of all User Accounts:

1. Click the *Users* tab.
2. A list is displayed of all the User Accounts that are managed by the Management Appliance.
3. To view a list that contains only the administrator accounts, select the **Administrators** navigation option.
4. To view a list that contains only the ECMS Receiver User Accounts select the **Users** navigation option.

To view Overview Information for a User Account:

1. Click the *Users* tab.
2. A list is displayed of all the user accounts that are managed by the Management Appliance.
3. Click the user account name about which you require information. The **User Account Overview** window will open.
4. From the **User Account Overview** screen, you can edit the following user information:
    - User name
    - Full name
    - Group
    - User's session status

To edit User Account Overview Information:

1. Open the **User Account Overview** for the appropriate user.
2. Edit the properties you wish to change. For example, the username, the user's full name, or the user group.
3. Click *Save*. The updated user account overview information is displayed.

User Access Configurations

Except for pooling cases, if there are no transmitters selected as part of the user's ECMS Transmitter configuration then that user cannot log in from an ECMS Receiver. (For more information on pooling, see *ECMS Transmitter Pooling*, Chapter 5, page 35.)

To assign ECMS Transmitters to an ECMS Receiver User:

1. Click the *Users* tab.
2. In a **User Accounts - All** window, click the appropriate user name. The **User Account Overview** window will open.

3. Select **Transmitters** from the side navigation menu. The **User Transmitters Configurations** window will open.
   a. Choose a target transmitter from drop-down list.
   b. Click *Save*.

Changing User Account Properties

You can change the following account properties for a user:

- The user (login) name and full name
- Login password
- Account login restrictions
- The user groups to which the user is assigned
- User contact details
- Target transmitters to which the user is assigned

Username

The user name information that you may specify for a user includes:

- **User Name** - The name that the Management Appliance uses to log in and identify the user.
- **Full Name** - The actual name of the user.

For example, you may use Engr10 as the username and Jonathan Z. Smith as the full name to identify the person associated with the username.

To change the name of a user:

1. Click the *Users* tab.
2. Click a user name. The **User Account Overview** window will open.
3. Type the user name for the user.
4. Type the full name of the user.
5. Click *Save* and then click *Close*.

User Passwords

A user's password can only changed by an administrator. If a user wants to change their password they must contact an administrator.

NOTE: A password must contain between 6 and 64 alphanumeric characters. With the exception of '+' and '-' all ASCII characters may be used.

To change a user password:

1. Click the *Users* tab.
2. In a **User Accounts** window, click the appropriate username. The **User Account Overview** window will open.

3. Click *Password* in the side navigation bar. The **User Password** window will open.
4. Type the new password for the user and verify the new password.
5. Click *Save* and then click *Close.*

Editing User Account Restrictions

The administrator wants to edit a user's account restrictions. For example, the user may have had their account disabled and asked the administrator to enable it.

The Management Appliance enables you to define the following restrictions for a User Account:

- Disable a User Account

To disable a user account:

1. Open the User Account Overview for the appropriate user.
2. Select the **Restrictions** navigation option. The **User Account Restrictions** window will open.
3. Make any changes necessary.
4. To save changes, click *Save* and then click *Close*.

User Account restrictions

Account restriction settings may be changed only for internal authentication users.

To change user account restrictions settings:

1. Click the *Users* tab.
2. Click a user name. The **User Account Overview** window will open.
3. Click *Restrictions* in the side navigation bar. The **User Account Restrictions** window will open.
4. To change account restrictions:
   - To prevent the user from logging into the Management Appliance, enable the **Disable User Account** checkbox. (Users with open sessions will remain logged in.) To re-enable the user account, de-select the **Disable User Account** checkbox.
5. Click *Save* and then click *Close*.

User Contact Details

You can add or edit a range of contact details for any existing user.

To add contact details for a user:

1. Click the *Users* tab.
2. Click a user name. The **User Account Overview** window will open.
3. Click *Contact Details* in the side navigation bar. The **User Contact Details** window will open.

4. In each of the fields type the information you wish to enter. You may also edit existing details. The fields available for each user are:
   - Home
   - Business
   - Home phone number
   - Business phone number
   - Mobile phone number
   - Mobile business phone number
   - Pager number
   - Primary email address
   - Secondary email address
5. Click *Save* and then click *Close*.

User Authentication Services

You may set a number of user authentication settings for users logging into the Management Appliance. For internal authentication, these settings relate to the minimum requirements that passwords must meet. You can set the minimum length, a requirement that passwords contain both alpha and numeric characters, and a requirement that passwords contain both upper and lower case characters.

To set the user authentication settings:

1. Click the *Users* tab. The **Users** tab opens.
2. Click *Authentication Services*.
3. Click *Internal*. This brings you to the **Authentication Service User Account Policies - Internal Window**.
4. Type a number to indicate the minimum password length in the **Minimum Password Length** field. (The default minimum setting is 6 characters.)
5. If required, click to select either or both of the following password options checkboxes:
   - *Passwords must contain both alpha and numeric characters*
   - *Passwords must contain both lower and upper case characters*
6. Click *Save***.**
7. Click *Close* to exit the screen and return to the **Accounts** screen.

CHAPTER 5

Advanced Operations

ECMS Transmitter Pooling

The Management Appliance allows you to pool transmitters so that they are accessible to multiple users. All discovered devices are assigned to a pool of transmitters. When a user logs in at a receiver that user will connect to the transmitter that has been assigned to them. If no specific transmitter has been assigned they will then connect to the first available transmitter, assuming pooling is enabled.

The pool of devices is automatically created and consists of discovered transmitters that are not specifically assigned to users and not in use in a connection. Each transmitter is assigned based on the order in which the users log in.

To enable Transmitter pooling:

1. In the Management Appliance, click the *System* tab.
2. Click *Emerge™ Desktop Manager Server.*
3. Click *Transmitter Pooling* in the left navigation pane.
4. Click to select the *Enable transmitter pooling*.
5. Click *Save* and then *Close*.

To disable Transmitter pooling:

1. In the Management Appliance, click the *System* tab.
2. Click *Emerge™ Desktop Manager Server.*
3. Click *Transmitter Pooling* in the left navigation pane.
4. Click to de-select the *Enable transmitter pooling*.
5. Click *Save* and then *Close*.

Backup and Restore

The Management Appliance allows you to back up the database and to store it in a location of your choice. In addition, you can also restore the database from a file located on any machine accessible on the LAN on which the Management Appliance is located.

To back up the Management Appliance database:

1. In the **Management Appliance**, click the *Systems* tab.
2. Click *Emerge™ Desktop Manager Server.*
3. In the left navigation pane, click *Backup and Restore***.**
4. Click *Backup System***.** The **File Download** dialog box appears.
5. Click *Save* and browse to the location where you want to store the system data.
6. Click *Save* and then click *Close*.

To restore the Management Appliance database:

1. In the **Management Appliance**, click the *Systems* tab.
2. Click *Emerge™ Desktop Manager Server.*
3. In the left navigation pane, click *Restore System*. The **Management Appliance Data Restore Wizard** opens.
4. Click *Next.*
5. Click *Browse* and browse to the location of the file.
6. Click *Next*. A dialog box appears to warn you that you are about to upload a stored database to the Management Appliance.
7. Click *OK*. A message indicating that the database has been successfully restored appears.

Management Appliance Upgrade

When upgrades of the Management Appliance software are available, you can upgrade your Appliance from the **Upgrade Management Appliance Software Wizard**.

CAUTION: All data must be backed up in advance of any software upgrade as all data files are overwritten during the upgrade process and all data will be lost.

To upgrade your Management Appliance software:

1. In the Management Appliance, click the *System* tab.
2. Click *Emerge™ Desktop Manager Server* and then click *Management Appliance Upgrade* from the left navigation pane.
3. The **Upgrade Management Appliance Software Wizard** appears. Click *Next***.**
4. Click *Browse* and browse to the location of the software upgrade files.
5. Click *Next***.** A dialog box appears and warns you that you are about to install a new version of the software and that all data should be backed up before proceeding.
6. Click *OK*. The new software version is installed.

Firmware Management

The firmware files for Transmitters and Receivers can be added, viewed and deleted using the **Unit Firmware Files** window. Once a firmware file(s) has been added, you may use the file(s) to upgrade the managed unit.

To display the Unit Firmware Files window:

1. Click the *System* tab.
2. Click *Unit Files* in the top navigation bar. The **Unit Firmware Files** window will open.

To add a firmware file:

1. Click the *System* tab. The **Unit Firmware Files** window will open.
2. Click *Add*. The **Add Firmware File Wizard** will appear. Click *Next*.
3. The **Select Firmware File to Import** window will open.
4. Enter the directory and filename (or browse to the location) of the firmware file you want to add to the Management Appliance Unit Files repository.
5. Type a description of the firmware file in the **Description** field.
6. Click *Next*. The firmware is added and the **Completed Successful** window appears.
7. Click *Finish*. The **Unit Firmware Files** window will open.

To display firmware information:

1. Click the *System* tab. The **Unit Firmware Files** window will open.
2. Click the version of a firmware file. The **Firmware File Properties** window will open.
3. The display includes:
   - Description
   - Release revision
   - Application/OS revision
   - Boot revision
   - FPGA revision
   - Unit type
   - Creation date-time

   If you wish, you may change the description of the firmware file in the **Description** field.
4. Click *Save* and then click *Close*. The **Unit Firmware Files** window will open and contain the firmware information if you saved the changes.

To delete firmware:

1. Click the *System* tab. The **Unit Firmware Files** window will open.

2. Click to select the checkbox next to the firmware you want to delete.
3. Click *Delete*. A confirmation dialog box will appear.
4. Confirm or cancel the deletion.

CHAPTER 6

Events and Event Logs

Introduction

When an enabled, defined event occurs in the Emerge™ DM2000 Desktop Manager (Management Appliance), it is saved in the event log. You can display the event log content or view details about an individual event log entry. If you wish, you can also export event logs to Microsoft(R) Excel for further analysis.

It is also possible to change the event log's retention period and export the event log's content.

NOTE: It is not possible to manually delete event logs. The Management Appliance automatically deletes logs which have expired. See *Changing the Event Log Retention Period* on page 40.

Event Severity and Categories

Events are classified by severity and category.

Event severity

Table 6.1 describes the event severity levels. The icon appears in event log displays.

Table 6.1: Event Severity Levels

Severity	Description
Debug	Abnormal events that require correcting at a later time.
Information	Events that are neither periodic nor problematic.
Warning	Abnormal events that require action but that do not result in failures of tasks or communication.
Error	Abnormal events of a more serious nature may require quicker action.
Fatal	Severe abnormal events impacting your Management Appliance session and requires immediate corrective action.

Event categories

Defined events can be classified in the following categories:

- Unit
- System
- Authentication
- Users
- Target Device
- User Statistics
- Access Control
- Sessions

Displaying the Event Log

There are several ways to customize event log displays.

- You may display all events in the log.
- You may display events of a particular severity or a particular category.

Event log display fields

The following fields are always displayed in the Event Log window:

- **Severity** - See *Event severity* on page 39. Clicking this field will display the **Event Information** window, which contains details about the event.
- **Date/Time** - Displays the date and time of an event in the Management Appliance's time zone.
- **Description** - Short description of an event.

To display the event log:

Click the *Reports* tab. The **Event Log - All** window will open.

- To display event log entries by severity, click one of the levels in the **Severity Level** column in the side navigation bar. (See the Note below for an alternative way to display the event log by certain severity levels.)
- To display event log entries by category, click one of the categories in the **Event Category** column in the side navigation bar.

Changing the Event Log Retention Period

By default, an event log is retained for seven days (one week).

NOTE: Event log information is stored in the Management Appliance database. Increasing the event log retention time may impact the performance of the Management Appliance.

To change the event log retention period:

1. Click the *Reports* tab.
2. Click *Log Configuration* in the side navigation bar. The **Event Log Retention Time** window will open.
3. Type a number of days in the **Days** field, or select it using the menu.
4. Click *Save*.

Creating an Event Log .csv File

All or selected columns of the event log can be exported as a comma separated values (.csv) file. The output event log file is named eventlog.csv by default, but you may change the name when it is saved. The .csv file may be viewed in a text editor or spreadsheet application, such as Microsoft Excel.

To create an event log.csv file:

1. Click the *Reports* tab.
2. Click the *Export* button in the **Event Log All** window.
3. The **File Download** dialog will open. Click *Save.*
4. Browse to the location where you want to save the log and click *Save***.**
5. The **Completed Successful** window will display.
6. Click *Close*.

APPENDICES

These Appendices contain the following information:

- *Technical Specifications* on page 44
- *Technical Support* on page 45

Appendix A: Technical Specifications

Table A.1: Emerge™ DM2000 Desktop Manager - Installer/User Guide Specifications

Network Connection	
Number	2
Type	Ethernet, 10BaseT, 100BaseT, GigE
Connector	RJ-45
Serial Port	
Number	1
Type	RS-232 serial
Connector	DB9 male
Mechanical	
H x W x D	4.3 x 42.7 x 35.6 cm (1.7 x 16.8 x 14 in), 1 U form factor
Weight	5.9 kg (13 lb)
Power	
AC Input Voltage	100 to 240 VAC
Rated Input Current	4A maximum
Rated Input Frequency	50 to 60 Hz
Rated Output Power	260 W maximum
Rated Output Voltages	+3.3 V (15 A), +5 V (25 A), +12V (18A), -12 V (1A)
BTU Rate	1400 Bus/hour (for rated output power of 260 W)
Environmental	
Temperature	0° to 35° Celsius (32° to 95° Fahrenheit) operating
Humidity	10 to 90% noncondensing operating
Safety and EMC Approvals and Markings	
Electromagnetic Emissions	FCC Class B, EN 55022 Class B, EN 61000-3-2/-3-3, CISPR 22 Class B
Electromagnetic Immunity	EN 55024/CISPR 24, (EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8, EN 61000-4-11)
Safety	EN 60950/IEC 60950-Compliant, UL Listed (USA), CUL Listed (Canada), TUV Certified (Germany), CE Marking (Europe)

Appendix B: Technical Support

Our Technical Support staff is ready to assist you with any installation or operating issues you encounter with your Avocent product. If an issue should develop, follow the steps below for the fastest possible service.

To resolve an issue:

1. Check the pertinent section of this manual to see if the issue can be resolved by following the procedures outlined.
2. Check our web site at www.avocent.com/support to search the knowledge base or use the online service request.
3. Call the Avocent Technical Support location nearest you.

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